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REMARKS

Applicants have amended pages 19 and 24 of the Specification to address the Examiner's objections and rejections. Applicants submit that the amendments are supported by, for example, the originally filed Specification and that no new matter is presented by the amendments.

Objection to the Specification is Obviated

The Examiner has objected to the amendment to the Specification filed on 3/17/03 under 35 U.S.C. §132 because it allegedly introduces new matter into the disclosure. Specifically, the Examiner alleges that the change to page 24, lines 17-21, is not supported and that Application number 09/745,965 does not correspond to Docket No. 3373 and was not filed concurrently with the present application. Applicants have amended the Specification to address this objection. Specifically, Applicants have amended the paragraph on page 24, lines 17-21 to correctly reflect the provisional application (60/252,617) that corresponds to Docket No. 3373. Applicants submit that no new matter is presented by these amendments and that the above objections are obviated by the amendments.

Claim Rejections under 35 U.S.C. §112 should be Withdrawn

Claims 1-39 are rejected under 35 U.S.C. §112, first paragraph, for alleged lack of enablement.

The Examiner alleges that the Claims do not reflect the particular steps and multiple linear regression models used in the examples to achieve the goal of selecting

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oligonucleotide probes and no guidance is provided on other computer implemented methods for selecting oligonucleotide probes. Applicants respectfully disagree.

Enablement is a legal determination of whether a patent enables one skilled in the art to make and use the claimed invention (*Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1384 (Fed.Cir.1986)). Even if some experimentation is required, as long as it is not unduly extensive, a specification can still be enabling (*Atlas Powder Co. v. E.I. du Pont De Nemours & Co.*, 750 F.2d 1569, 1576 (Fed.Cir.1984)). The rejected Claims are directed to methods, software and systems for selecting/designing oligonucleotide probes by predicting hybridization intensities of candidate probes, predicting quantitative responses of the candidate probes and selecting the probes based upon the predictions. The Claims are not limited to the specific examples in the Specification. The Specification, for example, in page 16, teaches that a physical model that is based on the thermodynamic properties of the sequence can be used to predict the hybridization intensities. The Specification (e.g., page 17) also teaches that there are a number of ways to establish the relationship between the sequence and free energy of the hybridization. Specific models are provided. According to the Specification, the parameters of the model MAY be determined by empirical data. In some embodiments, the parameters are determined by multiple linear regressions. Other methods for determining model parameters empirically were well known to one of skill in the art. Applicants respectfully submit that the specification has provided ample teaching to enable the full scope of the claims.

The Examiner also alleges that the model for probes of N bases in length set forth on page 19 (following Equation 8) remains confusing. Applicants have amended page 19 of the Specification to address this rejection.

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For the above reasons, the claims are fully enabled to their full scope. Applicants respectfully submit that this rejection of the Claims should be withdrawn.

CONCLUSION

For these reasons, Applicants believe the application is now in condition for allowance and should be passed to issue. If the Examiner feels that a telephone conference would in any way expedite the prosecution of the application, please do not hesitate to call the undersigned at (408) 731-5000.

The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account 01-0431.

If the Examiner has any questions pertaining to this application, the Examiner is requested to contact the undersigned attorney.

Respectfully submitted,



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